

LASCA LEAVES



Los Angeles County Department of Arboreta and Botanic Gardens



Sharing the table with guest of honor Lovell Swisher, Jr., right, were, center, Dick Bergen, club president, and Dr. Samuel Ayres, Jr., longtime club member and one of the founders of the Arboretum.

Photo by William Aplin

Men's Garden Club of Los Angeles

LAST NOVEMBER 9, the Men's Garden Club of Los Angeles held one of its regular luncheon meetings in the Demonstration Home Gardens at the Los Angeles State and County Arboretum. Sixty-five members and guests were on hand for the event which was enhanced by a lovely fall day. The club occupies

a rather special place among organizations concerned with gardening. Its membership is made up largely of professional people — lawyers, doctors, business executives — who share a common interest in horticulture. What they do, they do with style, a reputation they have had for the last 28 years.

Among other things, the club's meetings are well known for the

superior quality of the menus, the table settings, and the programs. These have been arranged for many years by Lovell Swisher, Jr., executive vice president of the club and one of its original members.

On this occasion, the feature of the meeting was the celebration of Mr. Swisher's 92nd birthday. For the main course, Francis Ching, Arboreta and Botanic Gardens di-

rector, had prepared his often-praised barbecued beef. Table decorations were made from plants introduced to Southern California by the Arboretum. Mr. Ching identified these plants and gave his guests a broad view of the Department's plant introduction program over the past 30 years. He also spoke about the recently developed Prehistoric and Jungle Garden and some of the plants growing there.

Following the luncheon, Mr. Ching led a tour of the Tropical Greenhouse and Prehistoric Garden after which each guest received a most appropriate gift, a *Cycas revoluta* plant, bringing with it the end of another memorable meeting of the Men's Garden Club of Los Angeles.



Following luncheon meeting, Director Francis Ching led members of the Men's Garden Club on tours of the Arboretum Prehistoric Garden, above, and the Tropical Greenhouse, below.

Photos by William Aplin



Herb Garden Improvement

OVER THE YEARS, improvements in the 1.2-acre herb garden at the Los Angeles State and County Arboretum have been mainly horticultural—developing special gardens like the Shakespeare, kitchen and medicinal gardens, installing low borders of Italian myrtle (*Myrtus communis 'Italica'*) along paths, moving beds to more favorable locations, and the like.

Last October, plans were drawn up aimed at improving public amenities. The first item called for improving the paths, often made muddy from sprinklers or runoff from rain, with flagstones cut from Palos Verdes rock. The Southern California Unit of the Herb Society of America donated \$750 for this work which began with laying the flagstones on the central path that leads through the Knot Garden and sundial area. The paving will eventually continue to a point near the Tallac Knoll waterfall. The next development calls for the installation of an interpretive center consisting of a display case, shelter, and benches. The Hancock Park Garden Club of Los Angeles has donated \$3,000 for the construction of the center. The display case will contain different types of herbs together with information on their horticultural requirements and their availability. The back side of the case will be used as a bulletin board to announce meetings and other activities of the society.

Descanso Gardens Enchantment

AT six o'clock in Descanso Gardens last September 22nd, some 350 people were sitting down to tables on the main lawn for a dinner-dance presented as "An Enchanted Evening." By the time the orchestra was playing their last set five hours later, everyone was agreeing that the affair, sponsored jointly

New flagstone paving in Arboretum Herb Garden.



Photo by Frank Simerly

by the Southern California Camellia Council and the Descanso Gardens Guild, had truly lived up to its billing. On the practical side, it had achieved its basic purpose: raising funds—close to four thousand dollars—for the planned new garden-center building. On the lighter side, the setting was enchanting, the weather was perfect, the dinner and music excellent, and the program, a salute to former County supervisor John Anson Ford on his 95th birthday, a delight.

Many people contributed to the success of the evening. Mrs. Randy McDonald and Mr. Tom Hughes were co-chairmen, Mr. Tom Burrows was master of ceremonies, and Mrs. Joseph Barrett presided over the presentations to Mr. Ford with the assistance of Mrs. Merrill Bittner and Mrs. Marilyn Stoke, both past presidents of the Department Board of Governors. Miss Susan Garner, a USC vocal arts major, sang a song based on a poem by Mr. Ford, Mrs. Dory Grade presented a picture she had painted in his honor entitled "Remembering Descanso," and Mr. Ken Anderson, former chief art director of Disney Productions, gave Mr. Ford two cartoon birthday cards he had drawn. Before the dancing

started, the winners of 15 raffle prizes were announced, the number one prize being a steamship trip from Los Angeles to Vancouver and return.

Bienvenidos a South Coast

CLOSE TO 200 PEOPLE attended a dinner-dance presented by the South Coast Botanic Garden Foundation last October 7 as part of a continuing effort to raise funds to meet their pledge for the South Coast Botanic Garden Administration Center and garden buildings. The theme of the affair was "Bienvenidos" or welcome. This led easily to the early-California-rancho theme with guests invited to dress in costumes appropriate to the period. This the majority did, thereby adding greatly to the festive atmosphere, to the particular delight of Patricia (Mrs. William) Box, a trustee and a foundation member who chaired the event.

The "Early California Rancho Celebration," as it blossomed into, started at 6 p.m. and lasted almost to midnight. Dinner and dance were held in the gaily decorated Hall of Horticulture. The dinner featured barbecued beef prepared by Department Director Francis Ching

whose culinary talents have aided numerous fund-raising events in recent years. On this occasion, there was also entertainment and dancing provided by Miss Lilly Johnson, singer-guitarist, and the Joe Valenti Jazz Orchestra. The door prize, a roundtrip for two from Los Angeles to Guadalajara, donated by Western Airlines, was won by Mr. and Mrs. Ove Hoyer, of Long Beach, both charter members of the foundation. Mr. Hoyer is also a member of the Department Board of Governors.

Assisting in the organizing and staging of the event was a committee of Peninsula and South Bay residents composed of Marie Louise Ferren, Mary Lou Steinmetz, Lucille Anthony, Eunice Antosik, Sue Appelt, Shirley Bradley, Lillian and Randy Mynum, Ernie Chapa, Marian Chu, Helen Gates, Sharon Guthrie, Mary Harrison, Louise Hillman, Jan Kellogg, Joan Meadowcroft, Burt Nakamura, Chris Peters, Cindy Peters, Sharlene Petersen, Sharon Ryan, Edna Schoenbaum, Lura Willon, and Jack Young.

School Field Trip Grant

A \$5,000 grant from the Times-Mirror Foundation to the Department of Arboreta and Botanic Gardens last September has made possible the continuation of school field trips to each of the Department's gardens. What the grant accomplished was to allow the schools to pay the \$10-per-bus entrance fee where funds had not been previously budgeted.

The need for the grant could be traced back to Proposition 13 and the ensuing economic domino effect it caused. First, admission and tram fees were ordered by the Board of Supervisors at the Arboretum, Descanso Gardens, and South Coast Botanic Garden. The admission charge was extended to include each busload of students visiting a garden as part of their school field trip program. The schools, their budgets

already strained by Proposition 13, could not pay the fees and began cancelling their garden field trips. The reduction was dramatic. As an example, the average number of students that used to visit the Arboretum in the month of October dropped from 1,500 to 300 this last October.

Apprised of this situation, Mr. Charles R. Redmond of Times-Mirror announced the contribution of \$5,000 "to assist in underwriting the cost of transporting school children by bus to the Los Angeles State and County Arboretum, Descanso Gardens, and South Coast Botanic Garden during the 1978-79 year."

By November, the number of school field trips to each garden began to rise. At this writing, it is expected that the number will continue to rise and, as Director Francis Ching wrote to Mr. Redmond, "enable at least 500 school groups to participate in field tours that give youngsters an insight into the relationship between plants and man, or a view of California history in which the Arboretum and the land it occupies played an integral part." Supervisor Peter Schabarum accepted the grant on behalf of the Board of Supervisors.

Pruning Demonstrations

THIS IS THE TIME of year to call attention to three pruning demonstrations at South Coast Botanic Garden and Descanso Gardens. The reason, of course, is that the time to prune and the objectives of pruning go hand in hand. Basically, pruning is done to remove dead or diseased wood and for shaping a tree or shrub. Deciduous fine pruning is done during the dormant period and before new growth starts.

A demonstration on the pruning of roses will be given at Descanso Gardens Sunday, January 14, starting at 1 p.m. It will be handled by members of the Descanso Gardens staff and members of the Pacific Rose Society. As in the past, several hun-

dred chairs will be set up on the main lawn for the session during which experts on hand will field questions from the audience. A special feature of this event will be the sale of some outstanding roses, among them last year's All American Award winners. The proceeds of the sale will go toward improvements in Descanso's famous Rose Garden.

A rose-pruning demonstration will also be given at South Coast, this one on January 7th from 2 to 4 p.m. This presentation will be by the South Coast Pacific Rose Society.

On January 14th at South Coast, Superintendent Armand Sarinana and members of the South Coast staff will give a deciduous fruit tree pruning demonstration from 1 to 4 p.m.

Mark J. Anthony

AS THIS ISSUE OF *Lasca Leaves* was going to press, word came to us of the passing on November 18 of Mark J. Anthony, former superintendent of Descanso Gardens. Mr. Anthony, who was 70 years old at the time of his death, was assistant superintendent at Descanso from 1955 to 1961 and then superintendent until his retirement in 1973.

During his years at Descanso, he left his horticultural imprint on all parts of the garden, notably the native plant section in which he took particular pride. His chief horticultural interest, however, was in camellias, and he will be long remembered for his contributions as a breeder and grower both privately and in the famous camellia garden at Descanso. Two new camellias he developed he named after his wife, Catherine, and his daughter, Christine. He also has a son, Thomas. Mr. Anthony was born in Rock Island, Illinois. He came to Southern California at an early age where he attended high school and what was then Pasadena Junior College, earning a degree there in landscape design.



ORANGES

Leonid Enari

THE BIRTHPLACE of the orange is buried in southeast Asia. Most writers on the subject believe either south China or Cochin-China (present-day Vietnam) to be the most likely location, although there is no record of truly wild oranges having been found in these areas, nor, for that matter, in any other area. Though the native habitat of the orange remains uncertain, there is no doubt that it has been cultivated in China and India from remote ages.

Oranges were introduced into Europe in the sixth and seventh centuries by the Arabs who during their conquests planted orange trees in Spain. From Spain the fruit was taken to Italy and then to other countries. Although pleasantly aromatic, these oranges were extremely bitter and sour and were used mainly as a seasoning for fish and meat, the way we now use lemons. When the archbishop of Milan, in 1529, gave a sixteen-course dinner, the menu included caviar and oranges fried with sugar and cinnamon, brill and sardines with slices of orange and lemon, oysters with oranges and pepper, and sparrows with oranges.

In the 16th century, Portuguese sailors brought home from India oranges that were sweet. In the seventeenth century they brought back even sweeter ones from China. The

new orange quickly replaced the bitter orange and rapidly became one of the most appreciated and wanted of all fruits. Today, the botanical name for the bitter orange is *Citrus aurantiacum* L. and for the sweet orange, *Citrus sinensis* (L.) Osbeck. In the past they were considered to be the same species.

The desire to grow oranges in colder climates led to the development of orangeries where trees were planted in giant boxes and moved in and out with the seasons. The first orangeries were nothing more than heated buildings with large windows. As the years passed, they became more elegant. The orangery of Louis XIV contained facilities for banquets and balls held between stands of flowering and fruiting orange trees to create the impression that guests were dining and dancing in the middle of an orange grove. The king's gardeners had found the secret of forcing and were able to bring the orange trees into bloom any time of the year. By 1850, orangeries had become architectural masterpieces comparable with palaces and cathedrals.

From Europe, orange seeds were taken to the new world by Spanish and Portuguese explorers in the second half of the 15th century. The first orange grove in California consisted of 400 trees. It was planted in the San Gabriel Mission in 1804

and was named after Father Superior Zalvidea who had brought the seed from San Rafael, Mexico. The mission became the nucleus of California orange growing, supplying young trees for home and commercial planting.

Andrew Forbes, who wrote one of the earliest works on California (printed in England in 1835), cites wheat, maize, barley, pease (peas), beans, potatoes, hemp (marijuana), grapes, olives and grasses as the principal crops of California, but makes no mention of oranges.

William Wolfskill, an ex-trapper and trader from Kentucky, who in 1865 bought the famed Rancho Santa Anita, which included the present Arboretum site, was the first to see the commercial possibilities. In 1841, he planted an orange orchard in what is now downtown Los Angeles. In good years, this orchard brought him an income of \$1,000 an acre. The last crop disposed of in his lifetime, from about 28 acres, sold on the trees for \$25,000. Wolfskill's success stimulated others, and there was a considerable increase in orange planting after 1850. In 1862, there were about 25,000 orange trees in the state; by 1882 the number had increased to 500,000. It may be mentioned here that in 1881 the top price for a box of approximately 200 oranges was \$3.00, considered by the growers of that time to be a

marvelous return on their investment.

Up to 1880 or so, all cultivated oranges were grown from seed. Unlike apple, cherry, peach and many other fruit trees, oranges come fairly true from seed, the fruit from practically all seedlings being marketable. The fruit from an orchard

seems to be identical to Valencia.

The Washington navel orange was introduced into the United States in 1870 by William O. Saunders, superintendent of the Horticulture Bureau of Agriculture (now Department of Agriculture), Washington, D.C. Saunders had received from an American Presbyterian missionary in

two trees. When Mr. Tibbet sold his property in 1903, the new owner gave the two parent navel orange trees away. One tree was given to Frank A. Miller, a hotel operator, who transplanted it in the inner court of his hotel. He was helped in the planting by President Theodore Roosevelt, a guest in the hotel



Orange grove in San Joaquin Valley, California.

Photo courtesy of Sunkist Growers, Inc.

of seedlings, however, lacks uniformity, which is one of the chief requisites of a commercial product. Further, seedling trees grow so large they make gathering the fruit expensive. For these and other reasons, commercial orange trees today are propagated asexually by budding. Each orange-growing area has its own favorite varieties. In California and Arizona commercial cultivars are Washington Navel and Valencia. In Florida, growers prefer Parson's Brown, Hamlin, Pineapple, Homosassa, Temple, Valencia and Lue Gim Gon. The last cultivar

Bahia, Brazil, a crate of twelve young budded trees from a superior variety that was sweet, seedless, and had an umbilicus (navel) at its blossom end. The trees were propagated, and a number of them sent to Florida and California growers. Mrs. Luther C. (Eliza) Tibbet of Riverside was one of three persons in California to receive trees. She and her husband planted two in their homestead garden and gave budding material from them to other growers. Most of the Washington navel trees in California, and they number in the millions, originate from these

at the time. The tree, however, died several years later. The other tree was presented to the City of Riverside and transplanted to its present location near Palm and Magnolia Avenues where it is still living, but in declining health. It is designated California State Historical Landmark No. 20.

Compared with other subtropical trees, the orange tree is slow-growing. It requires about 15 years for a seedling to reach 25 to 30 feet, considered to be a typical mature height. The size of budded trees depends on the seedling they are

budded to and varies from 5 to 25 feet.

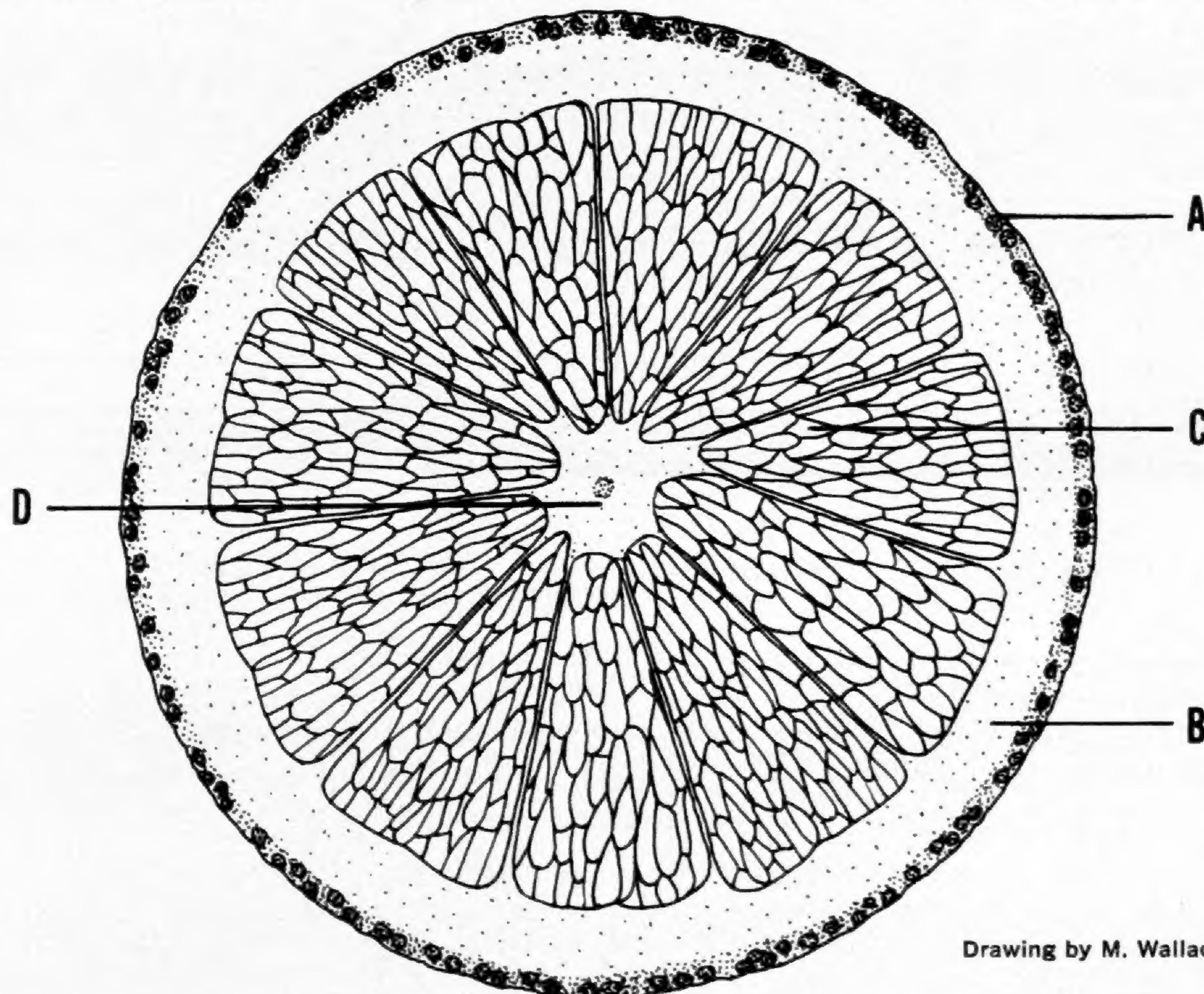
Orange trees flower in February and March, producing waxy-white, exquisitely textured fragrant blossoms in great number. The fruit sets in February or March and attains maturity one year thereafter when the tree blossoms again. A tree covered with green leaves, white flowers and orange-colored fruit offers an enchanting picture. Few authors described the flowering, fruiting tree better than William S.

Botanists call the fruit of orange and other citrus trees hesperidium. It differs from a berry in having a leathery rind and many juicy segments in place of solid pulp. The inner white and spongy part of the rind is known as albedo or mesocarp, the outer colored part of the rind as flavedo or epicarp. The epicarp is rich in small glands containing an essential oil.

The color of an orange has no correlation with the maturity of the flesh and juice inside. It can be

the inside becomes ripe and is as sweet as it can be.

The soluble solids in oranges are composed of sugars, organic acids, amino acids, Vitamin C, Vitamin B complex, pectins, essential oils, esters, glucosides and other organic compounds. It also contains inorganic compounds. It is interesting to note that the highest concentration of Vitamin C, or ascorbic acid, is found in the flavedo, less in the albedo, and least in the juice. It is also interesting that there is more



Drawing by M. Wallace

Cross section of an orange. A. Epicarp (flavedo). B. Mesocarp (albedo). C. Endocarp (edible portion divided into segments). D. Pith.

Spalding who, in his book, "The Orange," published in 1885, called it "a bride, clothed in satin emerald, crowned with snowy wreath and decked with precious jewels."

After reaching maturity, seedling trees produce fruit in large quantities. A 77-or 78-year-old tree in the garden of the San Gabriel Mission is reputed to have borne 10,000 oranges in one season. Of course, few orange trees produce similar yields.

green when ripe or orange-colored when not ripe. In the tropics, oranges remain green even when fully ripe. They become bright orange only in regions where night temperatures are below 50° F. much of the ripening period. When cold nights come before the fruit is fully developed in size, the surface turns to bright orange. When warm nights return, and this happens occasionally in California, the fruit turns green again and remains green even when

Vitamin C in green, unripe oranges than in ripe oranges.

The juiciness of an orange is affected by the climate in which it is produced. In wet climates like Florida, oranges have thin skins, are less sweet, and contain more juice. In arid climates like California, they develop a thick skin, are sweeter and contain less juice. In Florida, it is said that you can run over a California orange with a ten-ton truck and not even wet the pavement.

Most California oranges are eaten as fresh fruit. Most Florida oranges, as many as 80 percent, are sent to canneries that produce frozen orange juice concentrate.

Before being shipped to market, oranges are washed, dried, waxed, graded and sized. Sometimes they are also gassed or dyed. In the gassing, or degreening process, as the packers prefer to call it, green or partially green oranges are put into ethylene chambers for a few days. When taken out, they will have turned orange. The same happens to green oranges when they are stored in a room with ripening or ripe apples, pears, bananas or some other fruits which naturally give off ethylene gas in addition to carbon dioxide gas as they breathe. An apple can degreen a dozen or so oranges. In California, oranges are

often gassed to improve their already good looks. The "color added" stamped in purple letters on the rind of oranges means that they have been bathed in a solution of a dye known as Red No. 2. This dye is actually pink, but when applied to the green or partially green surfaces it produces an orange color.

There is no way to make an unripe orange ripe after it is picked from the tree. Apples, pears, and some other fruits go on ripening for weeks after they are separated from the tree, oranges do not.

The world production of oranges is about 600 million boxes. Each box weighs 70 pounds. The United States, with its 173,472,000 boxes, is the biggest producer in the world, followed by Brazil, Spain, Italy, Israel, and Mexico. In the United States, Florida is the leading pro-

ducer, followed by California, Arizona and Texas.

A small orange grove can be seen at the Los Angeles State and County Arboretum near the Coach Barn in the Historical Section. It was planted over 30 years ago to complement the Old Fashioned Rose Garden that was a part of the homesite of the 8,500-acre Rancho Santa Anita E. J. "Lucky" Baldwin had acquired in 1875. Baldwin was very active in the orange business at one time. In 1891, he had a 500-acre orange grove at the ranch plus a million young orange trees in an adjoining nursery. This is long since gone, leaving the grove at the Arboretum among the few urban examples of orange growing for city-dwellers to enjoy.

Dr. Enari is a senior biologist on the Arboretum staff.

LOS ANGELES STATE AND COUNTY ARBORETUM, Arcadia

January 7 — 9 a.m. to 5 p.m.

Gladiolus Bulb Sale

Presented by Southern California Gladiolus Society

January 19 — 8 p.m.

Theodore Payne Foundation Lecture
"Effects of Air, Water, Land on Natives" James Roof, former director, Tilden Botanical Garden, Berkeley

January 27, 28 — 9 a.m. to 5 p.m.

Bonsai Show

Presented by Baikoen Kenkykai Bonsai Society

February 4 — 10 a.m.

Sunday Morning Walk
Greenhouses

Tim Lorman, horticulturist

Presented by California Arboretum Foundation

February 17, 18 — 9 a.m. to 5 p.m.

Camellia Show

Presented by Temple City Camellia Society

March 11 — 2 p.m.

Sunday Afternoon Lecture

Exotic Economic Plants

Dr Enari, Arboretum senior biologist
Presented by California Arboretum Foundation

March 16 — 8 p.m.

Theodore Payne Foundation Lecture
"Our Heritage of Wild Flowers"
Mr and Mrs. Roy Raymond, nature photographers

March 31, April 1 — 9 a.m. to 5 p.m.

Aril Show

Presented by Aril Society

DESCANSO GARDENS, La Canada

January 14 — 1 p.m.

Rose Pruning Demonstration
Presented by Descanso staff and

CALENDAR

JANUARY, FEBRUARY, AND MARCH

Pacific Rose Society

February 25 — 10 a.m.

Sunday Morning Walk

Camellias, Flowering Trees and Shrubs
George Lewis, superintendent

March 3, 4 — Sat., 12 a.m. to 5 p.m.

Sun., 9 a.m. to 5 p.m.

Camellia Show

Presented by Southern California Camellia Council

March 17, 18 — Sat., 12 a.m. to 5 p.m.

Sun., 9 a.m. to 5 p.m.

Daffodil Show

Presented by Southern California Daffodil Society

Mar. 31, April 1 — Sat., 9 a.m. to 5 p.m.

Sun., 9 a.m. to 5 p.m.

Bonsai Show

Presented by Descanso Gardens
Bonsai Society

SOUTH COAST BOTANIC GARDEN, Palos Verdes Peninsula

January 7 — 2 p.m.

Sunday Afternoon in the Garden
Slide/Lecture on bromeliad culture
Charles Wiley
Presented by South Coast Botanic Garden Foundation

January 14 — 1 p.m. to 4 p.m.

Fruit Tree Pruning Demonstration
Armand Sarinana, superintendent, and garden staff

January 21 — 10 a.m. to 4 p.m.

Rose Pruning Demonstration
Presented by South Coast Rose Society

January 27, 28 — 9 a.m. to 5 p.m.

Camellia Show

Presented by South Coast Camellia Society

February 4 — 2 p.m.

Sunday in the Garden—Talk and Tea
Dr Mildred Mathias
Presented by South Coast Botanic Garden Foundation

February 11 — 2 p.m.

Bonsai Demonstration, Japanese Sumi Paintings Display
Presented by South Coast Bonsai Association

February 18 — 2 p.m.

Fuchsia Pruning Demonstration
Presented by South Coast Fuchsia Society

February 25 — 2 p.m.

Care of Indoor and Outdoor Ferns
Bob Heckenlaible

March 4 — 2 p.m.

Colorful Spring Plantings and Baskets
Demonstration
Rocky Marshall, Crest Nursery

March 11 — 2 p.m.

Orchids for the Amateur
Jerry Rehfield, president, South Bay Orchid Society

March 18 — 2 p.m.

Flower Arrangements
Mazie Jeanne George, president, South Coast Camellia Society

March 21 — 2 p.m.

A Safari to Your Backyard
Jess Morton, president, Palos Verdes Audubon Society

March 25 — 10 a.m.

Sunday Morning Walk
Aquatic Plant Section
Edward Hartnagel, assistant superintendent